Policy note

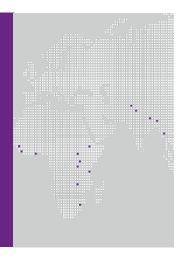
April 2020

International Growth Centre

Danny Leipziger¹ and Priya Manwaring²³

Uganda's industrialisation strategy

Challenges, opportunities, and lessons of experience



In brief: •

- Uganda currently faces a challenge of how to transform economic activity away from low valueadded agricultural production, non-tradeable services and manufacturing activities towards high value globally competitive industry.
- This project was funded by IGC Uganda
- While in many ways Uganda is facing a different global environment in which to pursue industrial development than earlier East Asian industrialisers, exportorientated industrialisation remains the most useful benchmark for policy.
- The experience of industrialisation in South Korea highlights three key ingredients for successful industrial policy: a clear export orientation, enforceable understandings between government and industry, and effective policy implementation.
- Identifying industries close to existing comparative advantages – and collaborating with regional partners in doing so – offers lower risks and more attainable benefits for industrial policy.

1. The challenge of industrialisation in Uganda

Industrialisation has been an engine for growth and development for a number of countries across Europe, the Americas and Asia. Historically, as economies transition from subsistence agricultural production towards higher value manufacturing, service and agro-processing activities, these industries offer higher value addition and more productive jobs that drive long term improvements in living standards.

Given its potential, industrialisation remains a key goal for the Government of Uganda in sustaining high rates of economic growth for job creation and shared prosperity. While Uganda has experienced a similar transition away from agricultural production since the 1980s (see Figure 1 below), this has not been accompanied by the emergence of globally competitive industry.

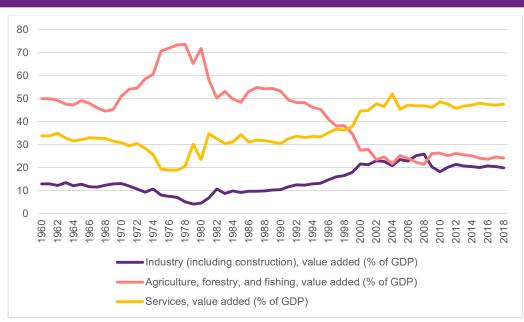


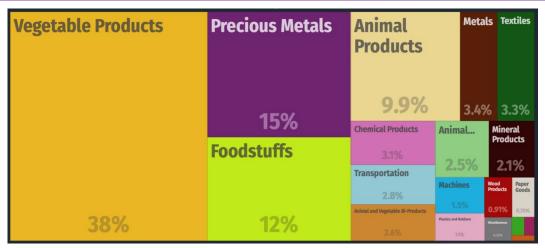
Figure 1: Value added (% of GDP) by sector in Uganda

(Data: World Bank Development Indicators 2020)

Despite relatively high rates of growth in recent years bolstered by favourable weather conditions, economic activity continues to be concentrated in low value-added agricultural production, non-tradeable services and manufacturing activities such as construction, that offer only a limited scope for long term productivity growth and high wage employment.

Crucially, there has been limited growth of high value *globally competitive* industry; exports continue to be mainly primary products, resulting in continued trade deficits and vulnerability to global commodity price shocks.

Figure 2: Uganda's export basket (2017)



(Data: Observatory of Economic Complexity, 2020)

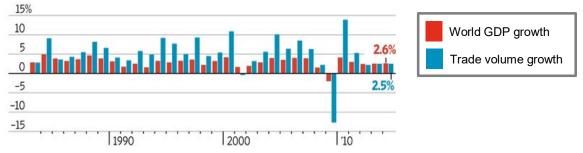
Leveraging industrialisation for growth in long run Uganda will require active policy reform to address key constraints to value addition and to unlock globally competitive production.

2. Adapting (but not conforming) to a changing global environment

In thinking about how Uganda can best leverage industrialisation for growth, it is important to consider the global environment in which industrial strategies are being implemented. In many ways, Uganda faces the same challenges that have historically plagued developing countries attempting to implement industrial policy, including limited investment in vital infrastructure (with poor electricity access a particular constraint to large scale competitive industry), low levels of human capital, and weak implementation capacity. However, in a number of important respects, Uganda is facing a different global climate than earlier East Asian industrialisers.

Slowdowns in international trade. First, there has been a notable slowdown in the expansion of global trade. While total imports and exports used to grow at twice the rate of global GDP, in recent years growth in trade has actually fallen *below* global GDP growth.





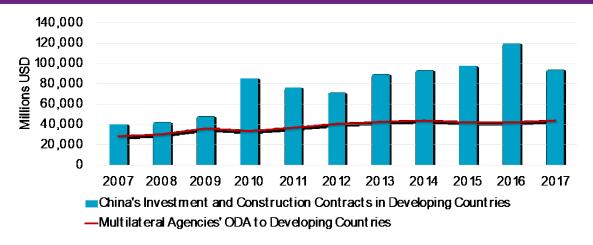
(Source: World Trade Organisation)

Growing uncertainty. There have also been significant changes in the level of uncertainty in the global economy. Whether measured by business or consumer confidence surveys or policy indices, there is increasingly limited knowledge of what policies will be implemented by governments and what their impact will be.

Related to these two developments is the rise of nationalism and populism across the world, with increasingly inward-looking policies being implemented by governments for domestic political reasons. These changes are in part a response to a further trend in the global economy: **rising incountry inequality** across middle- and high-income economies that has resulted in push back against globalisation that has not yielded uniformly beneficial outcomes for citizens.

At the same time, we see a major shift in global investment with **China playing a major role in driving global capital investment.** Aside from being the world's second largest economy and accounting for one sixth of global GDP, China is now a major exporter of capital, dwarfing aid contributions from MDBs.

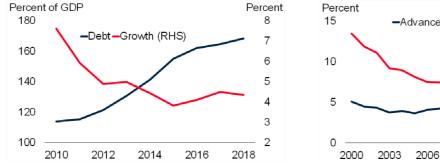
Figure 4: Multilateral agencies' ODA vs. China's investments in developing countries

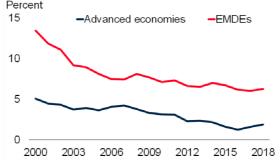


(Source: China Global Investment Tracker (The American Enterprise Institute and The Heritage Foundation) and Query Wizard for International Development Statistics (OECD))

The implications of growing indebtedness of many countries in sub-Saharan Africa as a result of these investments is as yet unclear, but there are worrying trends in terms of rising debt and slowing growth among emerging and developing countries. While current low interest rates have limited the risks associated with rising debt, this will eventually need to be paid back – and in foreign currency. As such, effective use of this capital is crucial, as is greater transparency on the terms of external borrowing.

Figure 5: Left: growth and debt in EMDEs, right: long term interest rates





Source: International Institute of Finance; World Bank.

A. Total debt (in percent of GDP) and real GDP growth (GDP-weighted at 2010 prices and exchange rates).

B. Average long-term nominal government bond yields (with 10-year maturities) computed with current U.S. dollar GDP weights, based on 36 advanced economies and 84 EMDEs.

(Source: Kose et al., 2020)

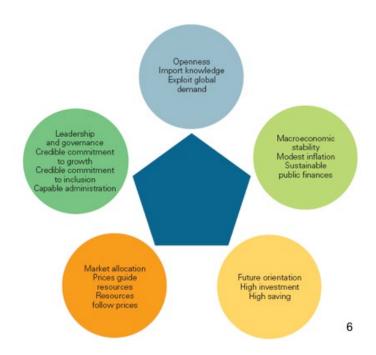
Given these forces of 'deglobalisation', policymakers today are faced with the question of whether fundamental changes are needed to national development strategies to focus not on export-oriented growth, but on production for domestic markets. But while is it true that returns to exports may be lower today than they were in previous decades, it is still the case that export-oriented growth strategies offer the most promise for developing countries today. Raising productivity by getting more out of capital and labour still remains the only way to drive growth - and there is no better yardstick to measure productivity than the ability of firms to compete on the global market.

3. Learning from successes and failures

In considering how Uganda can most effectively target export oriented industrial growth, it is illustrative to look at the experiences of successful (and less successful) attempts at industrialisation. Analysis undertaken as part of the Commission on Growth and Development's 2008 *Growth Report* highlights a number of ingredients for success that have been shared by countries that have sustained industrialisation-led growth rates at over 7%¹:

- Strong macroeconomic management
- Aggressive and effective investments in physical and human capital
- 3) Strong export-orientation
- 4) Exceptional policy coordination and management
- 5) Visionary economic leadership

While there has been significant progress made on improving macroeconomic stability in Uganda, and there are concerted efforts to improve the currently weak quality of investments in human and physical capital in the country, two of the factors above deserve further attention: policy



coordination and management, export orientation of growth strategies.

The importance of these two factors is perhaps best illustrated by considering the experiences of one famous case of successful industrialisation: South Korea. While there are important differences between South Korea in the 1960s and Uganda today that make attempting to replicate this strategy unwise – including much lower savings rates, high levels of competition in low-cost manufacturing from China, limited human capital, and additional land-based transport costs that limit the potential for assembly activities - examining the South Korean experience offers some useful lessons for future industrial policy.

The South Korean experience

South Korea transitioned from one of the poorest countries in the world to one of the richest in the space of a generation, driven by industrialisation in the 1960s and 70s. This process was driven by state-led industrial policy to provide support to targeted industries for export. Active intervention by government was undertaken to overcome market failures and build up industrial capacities in a number of ways, through access to credit, interventions in trade, tax incentives, technical support, and investments in education and R&D.

¹ Commission on Growth and Development (2008) 'The Growth Report: Strategies for Sustained Growth and Inclusive Development'

Industrial support in the 1960s targeted capacity development and export of light-manufacturing industries with relatively limited capital requirements such as clothing, footwear and electronics, driving growth rates to average 8.9% between 1963-1973. Focus attention then turned to heavy-chemical industries in the 1970s, including automobiles, shipbuilding and steel production. This involved a shift from previous 'result-oriented' policies that rewarded firms based on their export performance to a more 'process-oriented' approach, where the government played a more active role in selecting industries and working with them on providing necessary inputs for production. Crucially, close interaction between the government and the firms meant that there could be effective learning through mistakes – where problems arose at early stages of production, these could be resolved, and government support could be tailored accordingly.

Through this process, South Korea was able to diversify production and exports into competitive assembly, and subsequently into heavy industry for export. The share of exports from the heavy chemical industry rose from 7.4% in 1970 to 19.3% in 1980. This programme of 'picking winners' and supporting selected industries was both high risk and high return. Of the six sectors selected for support, four were successfully transformed into globally competitive industries. While there were some significant drawbacks of this policy in starving SMEs of credit and misallocating resources away from light manufacturing industries, these policies were largely successful in creating the Hyundais and Samsungs of today. Crucially, initial import substitution was strategically linked to export-oriented development and not a goal unto itself.

Comparative advantage for competitive advantage

One key source of debate among economists is the extent to which industrial policy should aim to leverage or change a country's existing comparative advantages in production. It is important to note that attempting to produce outside of a country's existing comparative advantage comes at a cost of inefficiency for the time that firms take to transition towards competitive production in new areas – over this period, resources are being directed away from firms producing in areas of current comparative advantage at the cost of producers in existing industries as well as consumers. According to Hausmann's theory of 'monkeys in the trees', countries should aim to compete in industries close to current comparative advantage and avoid costly jumps. Malaysia's experience in attempting to promote heavy industry in the 1980s is illustrative here; for roughly 20 years, the Proton car cost more to produce than its sales price.

While industrial policy in South Korea inherently relied on developing production capabilities in new industries, it is important to note that new capabilities were developed in industries related to current comparative advantages and making use of existing resources. Automobile assembly in the 1960s, for example, relied on a large pool of cheap and highly productive labour which the country had an abundance of. Where larger jumps were made into shipbuilding and steel manufacturing, these required significant government capacity in terms of resources and close monitoring to ensure resources were not wasted. For Uganda, the costs of learning (in terms of support needed as well as likelihood of success) may be lower when attempting to make smaller steps towards higher value industries.

However, similar attempts at industrial policy have been attempted in a number of countries in Africa, Asia and Latin America, with notably mixed results. In many cases, protectionist policies aimed at restricting competition in the domestic market have not resulted in the emergence of competitive industries – instead, uncompetitive industries have been protected indefinitely at the cost of consumers and scarce government resources.

What allowed Korea to succeed in industrialising where a number of other countries have failed? In addition to effective macroeconomic management, what stands out in Korea's experience was the clear conditions of support given to firms, and relatedly, the particular quality of policy implementation and coordination associated with implementing an industrial strategy.

The deal between government and the private sector

Industrialisation was supported by, but not driven by, the public sector in South Korea. Ultimately, the success of any industrial strategy relies on the development of competitive private firms that can continue to innovate and raise productivity over time. In South Korea, this was achieved through effective conditions imposed on firms in exchange for government support – including, crucially, the ability to export. Failure to meet the goals set out for industrial support resulted in the removal of this support; a credible threat that compelled firms to invest in enhancing global competitiveness. This provided the necessary "tough love" for firms to raise productivity in order to continue to benefit from this support. This can be seen when comparing the experience of Hyundai in shipbuilding with Daewoo – after detailed investigation that revealed performance below expected standards, government support to the latter was removed. This is in contrast with the experience of many Latin America, African and Asian countries where firms received incentives with limited conditions, resulting in the perpetuation of uncompetitive industries propped up by government support.

From design to implementation

Economic policy was organised under a Deputy Prime Minister who was charged with the design and - crucially – implementation of six five-year plans that would propel Korea from poverty to OCED membership. The Deputy Prime Minister oversaw the Economic Planning Board – a one stop shop for policy planning, budgeting and evaluation that allowed for effective coordination of relevant ministries, including those responsible for transport, energy, labour, finance, and trade. EPB was charged with monitoring implementation and had cross-ministerial oversight, in part fostered by monthly or bi-weekly meetings of all relevant ministries, chaired by the Vice Minister of EPB, to identify lapses in implementation and to remedy them. A dedicated set of research institutions supported this process by identifying specific products/markets for production and absorbing external lessons that could be shaped into domestic policy.

While the particular political economy of South Korea at the time allowed for such an institutional set up to be effective in enforcing conditions on firms, and it would be a mistake to attempt to 'import' these institutions to Uganda without ensuring that they have sufficient ability to enforce conditions on target industries. However, the experience of South Korea highlights the potential promise for selective innovative industrial policy based on enforceable conditions and effective implementation in Uganda.

4. Lessons for Uganda

Successful experiences show us that concerted national development policies can work – but they require careful design and effective implementation and they must be underpinned by many policy preconditions. The preceding discussion offers some key lessons for Uganda as it pursues an industrial strategy for long term growth:

1) Export-oriented industrialisation continues to offer the most promising path to development.

The importance of export-led growth as a benchmark for competitiveness highlights a key challenge with recent trends towards 'Buy National' programmes implemented in a number of developing countries that effectively shield local producers from global competition. While some elements of infant industry protection may be necessary, it is very difficult to imagine businesses becoming internationally competitive in the long run if they do not face competition in the domestic market. A certain level of conditionality on support is needed to make infant industry protection translate into long term productivity gains. As such, any attempts to encourage 'recapturing' of local markets needs to come with:

- Concerted efforts to raise productivity of domestic producers (and not just protect them against global competition)
- Clear timelines for such protection to combine import substitution with export promotion
- Effective competition among private sector actors for government support, unfettered by patronage, to avoid domestic market capture and local rent generation

It is important to note that given Uganda's strategic location, regional markets are likely to be crucial for Uganda's exports. While in 2005, the East African Community (EAC) absorbed only a tenth of all Ugandan exports, this has grown to a third by 2017, a key market for higher value manufactured goods in particular. The African Continental Free Trade Area (AfCFTA) offers a further expanded market for higher value exports.

However, in order to leverage the benefits of regional integration for competitiveness, countries within the EAC (and soon across the continent) will need to collaborate in identifying country specific comparative advantages and avoid competition in similar industries. Many regional free trade agreements have suffered from the fact that member countries want to target the same industries as part of their industrial strategy.

2) Support needs to be strategic

Related to the above, any support provided to firms for industrial development need to be strategic, time bound, and matched with clear, enforceable and monitorable conditions. Currently, this does not appear to be the case – a number of different tax incentives, for example, are offered to firms that fit a range of pre-specified criteria, but these are provided without clear and monitorable performance conditions that could be associated with continuation of this support over time. The most reliable measure of productivity gains in the long run is the ability of these industries to compete on global markets.

3) Policy implementation is key

In addition to a viable strategy, addressing constraints to policy implementation remains a key barrier to effective policy in Uganda – and this starts with getting the basic right.

The most effective strategies for industrial development cannot rely wholly or even mainly on the public sector as a producer; instead, long term competitive growth will come from private firms driven to raise efficiency in competing for markets. As such, the basic role for government is as an enabler and regulator of the market to provide an effective business environment for firms. But without addressing implementation issues that plague public investments in energy and transportation, more active industrial policy is unlikely to meet success. Developing a more effective public sector will require:

- Coherence among various national objectives, in order to design discrete and monitorable steps towards industrialisation
- Effective coordination among ministries
- Strong systems for monitoring and oversight of performance and improvements in the evaluation of the public investment program

One option here would be to strengthen a policy analysis unit with outside assistance to provide cost benefit analysis of programmes for industrial development as well as stronger monitoring of project implementation. Annual reviews of plans to identify what has an hasn't worked and to adjust course accordingly is likely to be particularly useful.

4) Enhancing comparative advantage

A final key lesson from the experiences of other industrialising countries is the importance of working closely with existing comparative advantages. Uganda's current industrial strategy focuses in particular on agro-processing, oil and gas, and iron and steel. While agro-processing seems to be a natural next step given Uganda's current competitiveness in agricultural production, there are reasons to be cautious about the other areas of focus.

The oil sector is a risky horse to bet on, being both expensive to produce and subject to high price volatility. The question for policymakers is whether it is possible to get to an efficient price of production relatively quickly, so that government debt does not accumulate to unsustainable levels in the pursuit of developing this industry. A forward-looking plan for oil and gas production should also take into account the impact of oil discoveries on inflation and exchange rates to avoid 'Dutch Disease' effects on the rest of the economy. Similarly, the strategy for iron and steel production appears to rely heavily on costly support such as concessional power tariffs, tax breaks and subsidies. It is important to consider whether these costs would be outweighed by the long-term benefits, particularly in light of intense competition in this industry from countries such as China, India and Brazil.

Particularly at early stages, it would be wise to avoid 'picking winners' that are far from Uganda's current competitive advantages — instead, policy attention should be focus on attracting and facilitating domestic and foreign investment that can help upgrade industrial capabilities over time, as was seen in Malaysia. This crucially requires better coordination between the government and private sector, a strategic approach to foreign direct investment, and the avoidance of major mistakes, such as undertaking unsustainable foreign debt.

5. Concluding remarks

An effective industrialisation strategy requires a clear national vision, with buy-in to that vision from all elements of society. It is equally important to be both realistic about domestic binding constraints and also cognizant of the changing external environment.

Autarkic industrialisation strategies have failed in many environments, even those with better initial conditions than Uganda. Therefore, notions of short-cuts to industrial success through 'buy national' policies are perhaps foolhardy. On the other hand, working closely with the private sector to deal with persistent constraints to building local capacity in higher value activities for export and improving the efficiency and functioning of the public sector can go a long way towards repositioning the economy for a better future.

6. References

Amsden, A.H., 1989. Asia's Next Giant: South Korea and Late Industrialization, Oxford University Press

Amsden (2008) 'The Wild Ones: Industrial Policies in the Developing World',

Chakravarty, S., 1987. Development planning: the Indian experience, Oxford University Press, Incorporated.

Chang, H.J., 1993. The political economy of industrial policy in Korea. Cambridge Journal of Economics, (17), pp.131–157.

Commission on Growth and Development (2008) 'The Growth Report: Strategies for Sustained Growth and Inclusive Development'

Hausmann and Rodrik (2002) 'Economic Development as Self-Discovery', Amsden (2008) 'The Wild Ones: Industrial Policies in the Developing World'

Hausmann, Cunningham, Matovu, Osire and Wyett (2014) 'How should Uganda grow?'

Hidalgo et al. (2007) 'The Product Space Conditions the Development of Nations'

IMF (2019) 'Uganda: Staff Report for the 2019 Article IV Consultation'

Khan, M.H., 2013. Political Settlements and the Design of Technology Policy. In J. E. Stiglitz, E. Patel, & J. Y. Lin, eds. The Industrial Policy Revolution II. Africa in the 21st Century. London: Palgrave.

Kim and Leipziger (1997) 'Korea: A Case of Government-Led Development', Leipziger (ed) *The Lessons of East Asia*. University of Michigan Press

Kose, Nagle, Ohnsorge, and Sugawara (2020) *Global Waves of Debt: Causes and Consequences*.

Lim (1999) 'Technology and Productivity: The Korean Way of Learning and Catching Up'

Lin and Chang (2009) 'Should Industrial Policy in. Developing Countries Conform to Comparative Advantage or Defy It?'

Manwaring and Rauschendorfer (forthcoming) 'Making the most of investment in Uganda: the role of supplier development programmes' IGC

Observatory of Economic Complexity (2020) Uganda Profile

Rodrik, D., 1995. 'Getting Interventions Right: How South Korea and Taiwan Grew Rich. Economic Policy', 20, pp.55 – 108.

Wade, 1990. Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization, Princeton: Princeton University Press.

Woo and Sul (2000) 'Industrial Upgrading of Korea: Process and Prospect' KDI

Yoo (1996) 'Challenges to the Newly Industrialized Countries: A Reinterpretation of Korea's Growth Experience.' KDI Working Paper Series No. 9608. Seoul: Korea Development Institute

¹ Professor of International Business at George Washington University and Managing Director of The Growth Dialogue. This note is based on Dr. Leipziger's lecture as part of the Bank of Uganda Governor's Lecture Series given In Kampala on February 18, 2020, chaired by Bank of Uganda Governor, Dr. Emmanuel Tumusiime-Mutebile

² Country Economist, International Growth Centre

³ The authors are grateful for the valuable comments from Richard Newfarmer and Deo Sande